ă.ă

5

10

15

20

25

30

What is Claimed is:

- 1. A method for monitoring effective thrombin levels in patients undergoing anticoagulant therapy comprising measuring circulating levels of soluble endothelial protein C receptor (sEPCR), wherein lowered sEPCR levels relate to lowered effective thrombin activity.
- 2. The method of claim 1, wherein the anticoagulant therapy involves a vitamin K antagonist.
- 3. The method of claim 1, wherein the anticoagulant therapy involves at least one of Warfarin, Coumadine, Previscan, and Sintrom.
- 4. The method of claim 1, wherein the anticoagulant therapy involves use of heparin, low molecular weight heparin, pentasaccharides, hirudin, hirudin analogs, coagulation factor inhibitors, protein C pathway components, tissue factor pathway inhibitors, anti-platelet compounds or fibrinolytic pathway components.
- 5. The method of claim 1, wherein the sEPCR is measured by an immunoassay.
- 6. The method of claim 5, wherein the sEPCR is measured by ELISA.
- 7. The method of claim 1, wherein the sEPCR level is determined by measuring sEPCR in a blood product, cerebrospinal fluid or urine.
- 8. The method of claim 7, wherein the blood product is plasma or serum.
- 9. A method for monitoring effectiveness of anticoagulant therapy comprising measuring circulating sEPCR levels, wherein decreases in sEPCR indicate that the anticoagulant therapy is effective.

Ĭ.4

25

10

- 10. The method of claim 9, wherein the anticoagulant therapy involves a vitamin K antagonist.
- The method of claim 9, wherein the anticoagulant therapy involves at least one of Warfarin, Coumadine, Previscan, and Sintrom.
 - 12. The method of claim 9, wherein the anticoagulant therapy involves use of heparin, low molecular weight heparin, pentasaccharides, hirudin, hirudin analogs, coagulation factor inhibitors, protein C pathway components, tissue factor pathway inhibitors, anti-platelet compounds or fibrinolytic pathway components.
 - 13. The method of claim 9, wherein the sEPCR is measured by an immunoassay.
- 15 14. The method of claim 13, wherein the sEPCR is measured by ELISA.
 - 15. The method of claim 9, wherein the sEPCR level is determined by measuring sEPCR in a blood product, cerebrospinal fluid or urine.
- The method of claim 15, wherein the blood product is plasma or serum.
 - 17. A method for identifying individuals in a hypercoagulable state comprising measuring circulating levels of soluble endothelial protein C receptor (sEPCR), wherein elevated sEPCR levels relate to hypercoagulability.
 - 18. The method of claim 17, wherein the sEPCR is measured by an immunoassay.
 - 19. The method of claim 18, wherein the sEPCR is measured by ELISA.

ļ.s

5

10

20

- 20. The method of claim 17, wherein the sEPCR level is determined by measuring sEPCR in a blood product, cerebrospinal fluid or urine.
- 21. The method of claim 20, wherein the blood product is plasma or serum.

22. A method for identifying a patient at risk of developing a hypercoagulability state comprising measuring circulating levels of soluble endothelial protein C receptor (sEPCR), wherein elevated sEPCR levels relate to an increased risk of hypercoagulability.

- 23. The method of claim 22, wherein the sEPCR is measured by an immunoassay.
- 24. The method of claim 22, wherein the sEPCR is measured by ELISA.
- The method of claim 22, wherein the patient has a condition frequently associated with hypercoagulability.
 - 26. The method of claim 25, wherein the patient has cancer, sepsis, diabetes, heart diseases, atherosclerosis or autoimmune disease.
 - 27. The method of claim 22, wherein the sEPCR is measured by an immunoassay.
 - 28. The method of claim 27, wherein the sEPCR is measured by ELISA.
- 25 29. The method of claim 22, wherein the sEPCR level is determined by measuring sEPCR in a blood product, cerebrospinal fluid or urine.
 - 30. The method of claim 29, wherein the blood product is plasma or serum.